Serial Number: 09/456,652 Filing Date: 08 December 1999 Title: Self-Describing Device Interface System

Assignee: Lexmark International

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the subject

application.

Listing of Claims:

1. (Currently Amended) An interface between two or more devices each having a data store,

wherein each device is in communication with one or more of the other devices, said interface

being configured to generate a datastream including at least one metavariable, said metavariable

being indicative of two or more parameters of at least one of the devices, and said datastream

occurring between the data store of one transmitting device and the data store of one or more

receiving devices such that the metavariable is transmitted from said one transmitting device to

said one or more receiving devices, wherein at least one of the parameters defines one or more

rendering characteristics to be applied to a print job, wherein the metavariable is treated as a

single variable containing data cumulative of variables for each parameter, and wherein said

metavariable is defined by a metavariable table including at least one metavariable setting and

two or more variable settings corresponding to each said at least one metavariable setting.

2. (Original) The interface of claim 1, wherein said metavariable is data indicative of the

configuration and settings of the transmitting device.

3. (Original) The interface of claim 1, wherein said metavariable is data indicative of the

configuration and settings of the receiving device.

4. (Original) The interface of claim 1, wherein said metavariable is a command altering two or

more settings of the receiving device upon receipt of said metavariable by the receiving device.

5. (Original) The interface of claim 1, wherein said metavariable is data indicative of two or

more application settings of the transmitting device.

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6. (Original) The interface of claim 1, wherein said metavariable is data indicative of two or

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more application settings of the receiving device.

7. (Original) The interface of claim 1, wherein said interface is between one or more computers

and one or more printers, each computer and each printer having a data store.

8. (Original) The interface of claim 7, wherein said metavariable is a command to the printer

changing two or more settings of the printer.

9. (Original) The interface of claim 7, wherein said metavariable is data indicative of the printer

settings transmitted by the printer to one or more receiving host computers.

10 - 15. (Canceled)

16. (Currently Amended) A method of communication between two or more devices each

having a data store and a processor, each device in a communication interface with one or more

of the other devices, the method comprising the steps of:

generating at least one metavariable in a transmitting device, the metavariable

being indicative of two or more parameters of at least one of the devices, wherein at least

one of the parameters defines one or more rendering characteristics to be applied to a

print job, wherein the metavariable is treated as a single variable containing data

cumulative of variables for each parameter, and wherein said metavariable is defined by a

metavariable table including at least one metavariable setting and two or more variable

settings corresponding to each said at least one metavariable setting; transmitting the metavariable to one or more other receiving devices through the

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communication interface;

receiving the metavariable at a the one or more receiving devices device; and

processing the metavariable in the receiving device for evaluation of action

required in response to receipt of the metavariable, wherein processing the metavariable

includes:

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reading the metavariable into a variable manager; and

retrieving and processing each of the variable settings in the metavariable table.

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17. (Previously presented) The method of claim 16, wherein the steps of generating the

metavariable in the transmitting device and transmitting the metavariable are generating the

metavariable in a printer and transmitting the metavariable from the printer.

18. (Previously presented) The method of claim 17, wherein the steps of receiving the

metavariable at the receiving device and processing the metavariable are receiving and

processing the metavariable at a host computer.

19. (Previously presented) The method of claim 16, wherein the steps of generating the

metavariable in the transmitting device and transmitting the metavariable are generating the

metavariable in a host computer and transmitting the metavariable from the host computer.

20. (Previously presented) The method of claim 19, wherein the steps of receiving the

metavariable at the receiving device and processing the metavariable are receiving and

processing the metavariable at a printer.

21. (Previously presented) The method of claim 16, wherein the step of transmitting the

metavariable to one or more other devices is transmitting the metavariable that is a command to

alter two or more parameters of the receiving device.

22. (Previously presented) The method of claim 16, wherein the step of transmitting the

metavariable to one or more other devices is transmitting the metavariable that is data indicative

of the configuration and settings of the transmitting device.

23. (Previously presented) A system for providing a communication interface between a

plurality of devices, said system comprising:

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a transmitting device having a first data store, said transmitting device having two

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or more parameters associated therewith;

at least one receiving device having a second data store, said receiving device

having two or more parameters associated therewith;

wherein said transmitting device transmits a data stream from said first data store

to said second data store of said receiving device, said data stream including at least one

metavariable, said metavariable being indicative of the two or more parameters of either

said transmitting device or said receiving device;

wherein at least one of the parameters defines one or more rendering characteristics to be applied to a print job, and wherein the metavariable is treated as a

single variable containing data cumulative of variables for each parameter, and wherein

said metavariable is defined by a metavariable table including at least one metavariable

setting and two or more variable settings corresponding to each said at least one

metavariable setting; and

wherein at least one of the transmitting device and the receiving device include a

variable manager configured to process variables including the metavariable.

24. (Original) The system of claim 23, wherein said metavariable is data indicative of two or

more configurations and settings of the transmitting device.

25. (Original) The system of claim 23, wherein said metavariable is data indicative of two or

more configurations and settings of the receiving device.

26. (Original) The system of claim 23, wherein said metavariable is a command altering two or

more settings of the receiving device upon receipt of said metavariable by the receiving device.

27. (Original) The system of claim 23, wherein said metavariable is data indicative of two or

more application settings of the transmitting device.

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28. (Original) The system of claim 23, wherein said metavariable is data indicative of two or

more application settings of the receiving device.

29. (Original) The system of claim 23, wherein one of said transmitting device and said

receiving device is a host computer, and the other of said transmitting device and said receiving

device is a printer.

30. (Original) The system of claim 29, wherein said metavariable is a command from a

transmitting host computer to a receiving printer, said metavariable changing two or more

settings of the printer.

31. (Original) The system of claim 29, wherein said metavariable is data indicative of the

printer settings, said metavariable transmitter by a transmitting printer to one or more receiving

host computers.

32 - 37. (Canceled)

38. (Currently Amended) An interface between two or more processes occurring upon a device

having at least one data store, each process in communication with one or more of the other processes, through the data store(s) of the device, said interface being configured to generate a

datastream including at least one metavariable, said metavariable being indicative of one or more

parameters of the device, and said datastream occurring between one transmitting process and

one or more receiving processes such that said metavariable is transmitted from said one

transmitting process to said one or more receiving processes, wherein at least one of the

parameters defines one or more rendering characteristics to be applied to a print job, wherein the

metavariable is treated as a single variable containing data cumulative of variables for each

parameter, and wherein said metavariable is defined by a metavariable table including at least

one metavariable setting and two or more variable settings corresponding to each said at least

one metavariable setting.

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39. (Original) The interface of claim 38, wherein said metavariable is data indicative of the

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configuration and settings of the device.

40. (Original) The interface of claim 38, wherein said metavariable is data indicative of one or

more application settings of the device.

41. (Original) The interface of claim 38, wherein said metavariable is a command altering one

or more settings of the device upon receipt of said metavariable by the receiving process.

Claims 42 - 47 (Canceled)